

Please delete and replace the paragraph at page 2, lines 4-12, with the following amended paragraph:

A¹ Most personal computer systems based on the INTERNATIONAL BUSINESS MACHINES ("IBM®") architecture use an interface cable to connect the monitor to the remainder of the personal computer system. This cable generally has a characteristic impedance of approximately 30 to 120 Ω and is terminated with an impedance of value Z_t that can range from approximately 2.2 k Ω to 4.7 k Ω or more. This termination impedance is so far removed from the characteristic impedance of the cable that the cable is effectively unterminated. This condition gives rise to reflections of fast signals on the line, which in turn give rise to distortions of those signals. In particular, horizontal synchronization ("h-sync") are sometimes distorted in this way.

Please delete and replace the paragraph at page 4, line 25 through page 5, line 11, with the following amended paragraph:

A² Figure 1 is a block diagram of example computer system 100 that may be found in many forms, including, e.g., mainframes, minicomputers, workstations, servers, personal computers, internet terminals, notebooks, and embedded systems. Personal computer ("PC") systems, such as those compatible with the x86 configuration, include desktop, floor standing, or portable versions. Example computer system 100 includes a computer system hardware unit that further includes a microprocessor (or simply "processor") 110, associated main memory 150, a number of peripheral devices that provide I/O for computer system 100, and computer system software that runs on the hardware unit. Example computer system 100 is powered by power supply 114 with voltage regulator 115. The peripheral devices often include keyboard 191, mouse-type input device 192, CD drive 164, and others not shown, including floppy and hard disk drives, modems, printers, terminal devices, televisions, sound devices, voice recognition devices, electronic pen devices, and mass storage devices such as tape drives or digital video disks ("DVDs").

Please delete and replace the paragraph at page 5, lines 13-30, with the following amended paragraph:

A³

The peripheral devices usually communicate with the processor over one or more peripheral component interconnect ("PCI") slots 166, universal serial bus ("USB") ports 175, or integrated device electronics ("IDE") connectors 176. PCI card slots 166 may use card/bus controller 165 to connect to one or more buses such as host bus 120, PCI bus 160, and low pin count ("LPC") bus 180, with the buses communicating with each other through the use of one or more hubs such as graphics controller memory hub 140 and I/O controller hub 170. Typical systems such as example computer system 100 often include network interface card slots 198 to accommodate network cards that mediate between the computer and the physical media over which transmissions to and from computer system 100 travel. USB ports 175 and IDE connectors 176 may connect to one or more of hubs 140, 170. The hubs may communicate with each other through the use of one or more links such as hub link 190. Generally, I/O devices can also be accommodated by parallel port 193 and serial ports 194 that are coupled to I/O controller 187 that is in turn coupled to LPC bus 180. Typical computer systems often include monitor 168 coupled to a display controller 131 coupled to graphics memory controller hub 140 by a graphics bus 135 and main memory 150 coupled to graphics memory controller hub 140 by a system management ("SM") bus 130. Finally, a typical computer system also includes software modules known as the basic input/output system (BIOS) (not shown). The BIOS code is either copied from an external medium such as a CD to, or stored on, memory area 200 in firmware hub 186.

Please delete and replace the paragraph at page 6, line 24 through page 7, line 3, with the following amended paragraph:

A⁴ From interface cable 210, the signals from the red, green, and blue output gates, 196A, 196B, and 196C, respectively, travel to video amplifiers 169, and control the illumination of red, green, and blue phosphor dots on the screen of monitor 168. The signals for the horizontal and vertical synchronization output gates 197A and 197B travel from interface cable 210 to horizontal and vertical synchronization receiver input gates 171A and 171B, respectively, (together, receiver input gates 171) in monitor 168, from receiver input gates 171 to horizontal and vertical synchronization processors 172A and 172B, respectively, (together, synchronization or sync processor 172), and from sync processor 172 to horizontal and vertical deflectors 173A and 173B, respectively, which control the deflection of the electron beam used to illuminate the screen of monitor 168.

Please delete and replace the paragraph at page 8, lines 12-17, with the following amended paragraph:

A⁵ During the period from time t_0 to time t_1 , h-sync output gate 197A "sees" h-sync line 211A to be terminated with the effective impedance Z_c of the interface line, output voltage V_O of h-sync output gate 197A rises from $V_O = 0$. During the period from time t_1 to time t_2 output voltage V_O substantially levels off at the voltage level appropriate to drive a load of impedance Z_c . This substantial leveling-off is called a "pedestal" in the output signal of h-sync output gate 197A. In Figure 4, this pedestal voltage level is designated as V_{pl} .

Please delete and replace the paragraph at page 8, line 26-29, with the following amended paragraph:

A⁶ During the period from time t_3 to time t_4 , the output voltage of h-sync output gate 197A substantially levels off again, forming another pedestal, because h-sync line 211A once again appears to h-sync output gate 197A to be terminated with the effective impedance Z_C of the interface line. This pedestal has voltage V_{p2} .
